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IC - G11C16/06 ; H02M3/07

MC - U13-E02 U14-A07B U24-D02A

PA - (MATU) MATSUSHITA DENKI SANGYO KK

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PR - JP19970104498 19970422

XIC - G11C-016/06 ; H02M-003/07

XP - N1999-039967

AB - J10304653 The circuit has a charge pump circuit (10) including a serial connection of pump blocks (11-1n) that perform predetermined booster operation through the charging and discharging of energy in capacitors (C1-Cn). Clock signals (CLK1-CLKn) are supplied by a clock generator (2) to the pump blocks of the charge pump circuit which provides a predetermined booster voltage.

- The output terminals of the pump blocks of the charge pump circuit are connected to the diodes (D01-D0n) of a rectifier circuit (4) consisting of the series connection of a capacitor (C0) and the parallel connection node of the diodes (D01-D0n). Preferably, a voltage detector determines the output voltage of the rectifier circuit so that the supply of clock signals from the clock generator to the charge pump circuit can be controlled.
- ADVANTAGE - Enables selective extraction of output voltage of multiple level using simple circuit component. Stabilises output voltage even if source voltage is varied. Attains reduction of power consumption since generation of unnecessary clock signal is stopped.
- (Dwg.1/4)

IW - BOOST CIRCUIT SEMICONDUCTOR DEVICE RECTIFY CIRCUIT CONSIST SERIES CONNECT CAPACITOR PARALLEL CONNECT NODE DIODE CONNECT CHARGE PUMP CIRCUIT PUMP BLOCK CONNECT CORRESPOND DIODE

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NC - 001

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ORD - 1998-11-13

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TI - Booster circuit for semiconductor device - has rectifier circuit consisting of series connection of capacitor and parallel connection node of diodes, which is connected to charge pump circuit by making pump blocks connect to corresponding diodes